ing parts diſperſed up and down in it ; by the Wheel Barometer, *heavy,*

B. *Another Scheme, which I drew from my Obſervation, about* 10. *minutes after, the ſame morning. Both theſe were obſerved with a very deep Eye-glaſs.*

C. *March* 10$^{d.}$ 00$^{h.}$ 20$^{m.}$ *in the morning: the Air heavy and inflective. Uſe was made of a ſhallow or ordinary Charge.*

D. *March* 10$^{d.}$ 3$^{h.}$ 00^{m} *in the Morning; the Air very heavy and Inflective, which made it glare and radiate, and be more confuſed, than about* 3. *hours before. A ſhallow Charge.*

E. *March* 21$^{d.}$ 9$\frac{1}{2}$$^{h.}$ *poſt merid; the Air light (in weight) and clear, without inflecting parts; the Face appear'd moſt diſtinctly of this Forme. A ſhallow Charge.*

F. *March* 21$^{d.}$ 11$\frac{1}{4}$$^{h.}$ *poſt merid; the Air continuing very light and clear, without inflecting vapours. A ſhallow Charge.*

G. *March* 22$^{d.}$ 8$\frac{1}{2}$$^{h.}$ *poſt mer. the Air clear, with few inflecting veins in it, and indifferent light. A ſhallow Charge.*

H. *March* 23$^{d.}$ 9$\frac{1}{2}$$^{h.}$ *poſt mer. the Air pretty light, but moiſt, and ſomewhat thick and hazy, but ſeem'd to have but few veins, or inflecting parts.*

I. *March* 28$^{d.}$ 3$^{h.}$ *p. m. much the ſame kind of Air with that of March* 23; *light, moiſt, and a little hazy, with ſome very few veins.*

Obſervations *Made in* Italy, *confirming the former, and withall fixing the* Period *of the Revolution of* Mars.

Theſe Obſervations we ſhall ſummarily preſent the Curious in theſe parts with, as they were lately preſented (by Letter from his Excellency the Ambaſſadour of *Venice*, now reſiding at the Court of *France*) to the *Royal Society*, in ſome printed ſheets of Paper, entituled, *MARTIS, circa Axem proprium Revolubilis, Obſervationes, BONONIÆ à JO. DOMINICO CASSINO habitæ*; come to hand *June* 3. 1666.

In theſe Papers the Excellent *Caſſini* affirms ;

1. That with a *Teleſcope* of 24. *Palmes*, or of about 16 *Foot*, wrought after S. *Campani's* way, he began to obſerve *February 6.* 1666 (ſt-n.) in the morning, and ſaw two dark Spots in the *firſt* Face of *Mars.*

2, That

2. That with the ſame Glaſs he obſerv'd *Febr.* $\frac{14}{24}$, in the Evening, in the *other* Face of this Planet, two other Spots, like thoſe of the firſt, but bigger.

3. That afterwards continuing the Obſervations, he found the Spots of theſe two Faces to turn by little and little from *Eaſt* to *Weſt*, and to return at laſt to the ſame ſituation, wherein he had ſeen them firſt.

4. That S. *Campani*, having alſo obſerv'd at *Rome* with Glaſſes of 50. *Palmes* or about 35 *Foot*, likewiſe of his own contrivance, had ſeen in the ſame Planet the ſame *Phenomena.*

4. That ſometimes he hath ſeen, during the ſame night, the two Faces of *Mars*, one, in the Evening, the other in the Morning.

6. That the Motion of theſe Spots in the inferior part of the apparent Hemiſphere of *Mars*, is made from *Eaſt* to *Weſt*, as that of all the other Celeſtial Bodies, and is perform'd by Parallels, that decline *much* from the *Equator*, and *little* from the *Ecliptick.*

7. That the Spots return the next day to the ſame ſituation, 40. minuts later, than the day before; ſo that in every 36. or 37. daies, about the ſame hour, they come again to the ſame place.

8. He promiſes ſhortly to give us the particular *Tables* of this Motion and of its Inequalities, together with the *Ephemerides* themſelves.

9. He repreſents, that ſome other *Aſtronomers* have alſo made at *Rome* ſeveral Obſervations of theſe Spots of *Mars*, from *March* $\frac{14}{24}$. to *March* $\frac{22}{30}$. with Glaſſes, wrought by *Euſtachio Divini*, of 25. and 45. Palmes: Which Spots he makes little differing from his own, of the firſt Face; as will by and by appear, by the direction to the *Schemes.*

10. But he adds, that thoſe other *Roman* Aſtronomers, that have obſerv'd with *Divini's* Glaſſes, will have the Converſion of *Mars* to be performed, not in 24 h. 40 *m.* (as he maintains it is) but in about 13 h.

11. And to evince, that they are miſtaken in theſe Obſervations of theirs; he alledges, That they aſſure that the Spots, which they have ſeen in this Planet, (by an *Euſtachian* Teleſcope) the $\frac{22}{30}$ of *March*, were ſmall, very diſtant from one anothe, remote from the middle of the Disk, and the *Oriental* Spot was leſs, than the *Occidental* (as is repreſented by the *Fig.* O; like that of the firſt Face of *Mars.*) whereas, on the contrary, He

He (*Caſſini*) pretends to evidence by his Obſervations, made at the ſame time at *Bononia*, that, the ſame day and hour, thoſe Spots were very large, neer one another, in the midſt of the Disk, the Oriental bigger than the Occidental (as appears by *Fig*.P, which is that of the ſecond Face of *Mars*.)

12. Beſides, he declares, that thoſe *Aſtronomers* were too haſty, in determining, after 5 or 6 Obſervations only, in how much time *Mars* finiſh's his Revolution; and denies it to be perform'd in 13 hours: adding, that, though Himſelf had obſerv'd for a much longer time, than they; yet he durſt not for a great while define, Whether *Mars* made but *one* Turn in 24 hours 40 minuts or *two*; and that all, that he could, for a long time affirm, was onely this, that after 24 h. 40 m. this Planet appear'd in the ſame manner he did before.

13. But ſince thoſe firſt Obſervations, He affirms to have found cauſe to determine, that the Period of this Converſion is made in the ſaid ſpace of 24 h. 40 m; and not oftner than once within that time; Alledging for proof;

1. That, whereas *Febr*.6. (ſt.n.) he ſaw the Spots of the firſt Face of *Mars*, moving from eleven of the Clock in the night, until break of day, they appear'd not afterwards in the Evening after the riſing of that Planet (witneſs ſeveral intelligent perſons, which he names, that were preſent at the Obſervations) Whence he infers, that after 12 hours and 20 minuts, the ſame Spots did not come about; ſince that the ſame, which in the morning were ſeen in the middle, upon the riſing of *Mars*; after 13 or 14 hours, might have appear'd neer the Occidental Limb. But, becauſe he might be impoſed upon by Vapors, whilſt *Mars* was yet ſo neer the *Horizon*, he gives this other determination, *vid.*

2. Whereas he ſaw the firſt Face of *Mars* the 6 of *February* at 11 of the clock of the night following; he did not ſee the ſame after 18 daies at the ſame hour; as he ought to have done, if the Period were abſolved in the ſpace of 12 h. 20 m.

3. Again, whereas he ſaw *Febr*. 24. in the Evening, the other Face of *Mars*, he could not ſee the ſame, the 13. and 15. day of *March*, to wit after 17 and 19 days; as he ſhould have done, if the Revolution were made in the newly mention'd time:

4. Again, whereas the 27, of *March* in the Evening he ſaw the

the ſecond Face of *Mars*, he could not ſee it the 14. and 16. of *April*.

From all which Obſervations he Judges it to be evident, that the Period of this Planets Revolution is not perform'd in the ſpace of 12. hours 20, minutes, but in about 24 hours 40 minutes; more exactly to be determin'd by comparing diſtant Obſervations: And that thoſe who affirm the former, muſt have been deceived by not well diſtinguiſhing the two Faces, but that having ſeen the ſecond, taken it for the firſt.

All which he concludes with this Advertiſement, that, when he defines the time of the Revolution of *Mars*, he does not ſpeak of its *Mean* Revolution, but onely of that, which he obſerv'd, whilſt *Mars* was oppoſite to the Sun; which is the ſhorteſt of all.

The Figures of the Principal *Obſervations, repreſented in the Book here diſcourſed of, may be ſeen in the annexed* Scheme; videl.

K. *One of the Faces of* Mars, *as S.* Caſſini *obſerved it* March 3. (*ſt.n.*) 1666. *in the Evening, with a Glaſs of 24 Palmes.*

L. *The other Face, as he ſaw it* Febr. $\frac{14}{24}$. *in th Evening.*

M. *The firſt Face, as S.*Campani *ſaw at Rome,* March 3. 1666. *in the Evening, with a Glaſs of 50 Palmes.*

N. *The ſecond Face, as the ſame* Campani *obſerv'd it* March $\frac{18}{28}$. *in the Evening.*

O. *The Figure of* Mars, *as it was ſeen at* Rome *by a Teleſcope of* Divini *of 45 Palmes*, March $\frac{22}{30}$.

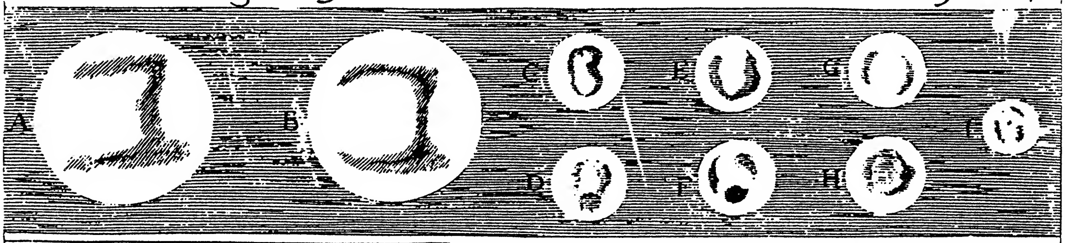
P. *The Figure of the ſaid Planet, as it was ſeen the ſame day and hour at Bononia by* Caſſini; *being that of the ſecond Face.*

Some Obſervations Lately made at London *concerning the Planet* Jupiter.

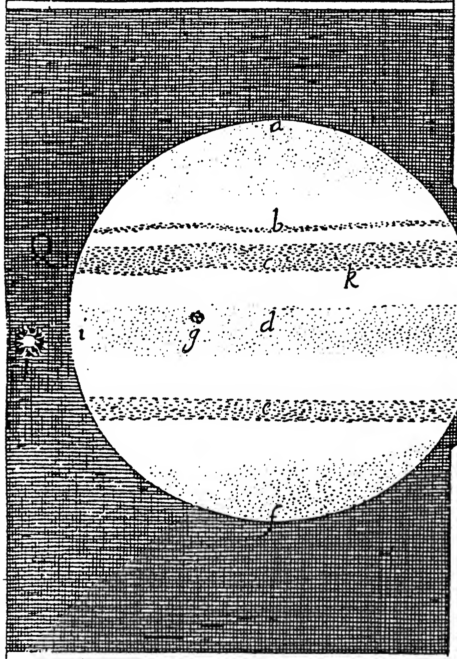
Theſe, as they were made, ſo they were imparted, by Mr. *Hook*, as follows:

A. 1666. *June* 26. between 3. and 4. of the Clock in the morning, I obſerved the Body of *Jupiter* through a 60. foot-glaſs, and found the apparent Diameter of it through the Tube, to be ſomewhat more than 2. degrees, that is, about four

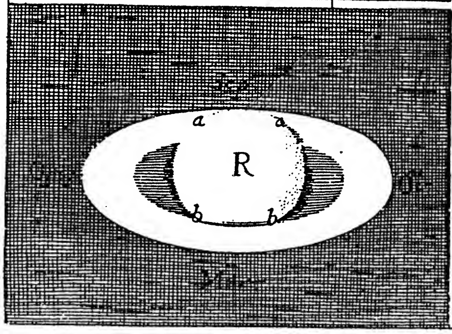
The Figures of the Obſeruations made in London -Tranſact: N 14th



The Obſeruation of Iupiter.



The late Obſerv of Saturne.



The Figurs of yᵉ Italian Obſeruations.